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EXAMINER

CUMMING, WILLIAM D

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,256

Applicant(s)

JOHNSON & HEUBEL

Examiner

WILLIAM D CUMMING

Art Unit

2683

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 37-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 37-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/18/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the location system comprises a mobile telephone switching office as stated by claim 28, the steps of storing a geographic representation of a cellular coverage area and processing the position based on geographic representation as stated by claim 40; the step of correlating the position to a road or highway by a geographic information database and the geographic information database itself, as stated by claim 41, the steps of processing a velocity vector to determine the road and highway that the portable wireless devices appears to be traveling and considering the road or highway in determining the target cell that is geographically closest as stated by claim 42 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, is required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

Timing of Corrections

Applicants are required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

3. In addition to Replacement Sheets containing the corrected drawing figure(s), applicants are required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "*Annotated Sheets*" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

4. The drawings were received on January 21, 2005. These drawings are approved.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 28 and 40-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification inadequately describe the location system comprises a mobile telephone switching office as stated by claim 28. The "*written description*" of the invention required by first paragraph of 35 USC §112 is separate and distinct from that paragraph's requirement of enabling disclosure, since description must do more than merely provide explanation of how to "*make and use*" the invention. Applicant must also convey, with reasonable clarity to those skilled in the art, that applicant, as of the filing date sought, was in possession of the invention, with the invention being, for purpose of "*written description*" inquiry, whatever is presently claimed. Drawings alone may, under proper circumstances, provide "*written description*" of the invention required by 35 USC §112, and whether the drawings are from design application or utility application is not determinative. In order to satisfy "*written description*" requirement of 35

USC §112, the proper test is whether drawings conveys, with reasonable clarity to those of ordinary skill in the art, the claim subject matter.

The specification inadequately describe and fails to originally support the now claimed the steps of storing a geographic representation of a cellular coverage area and processing the position based on geographic representation as stated by claim 40; the step of correlating the position to a road or highway by a geographic information database and the geographic information database itself, as stated by claim 41, the steps of processing a velocity vector to determine the road and highway that the portable wireless devices appears to be traveling and considering the road or highway in determining the target cell that is geographically closest as stated by claim 42

Claim Rejections - 35 USC § 102

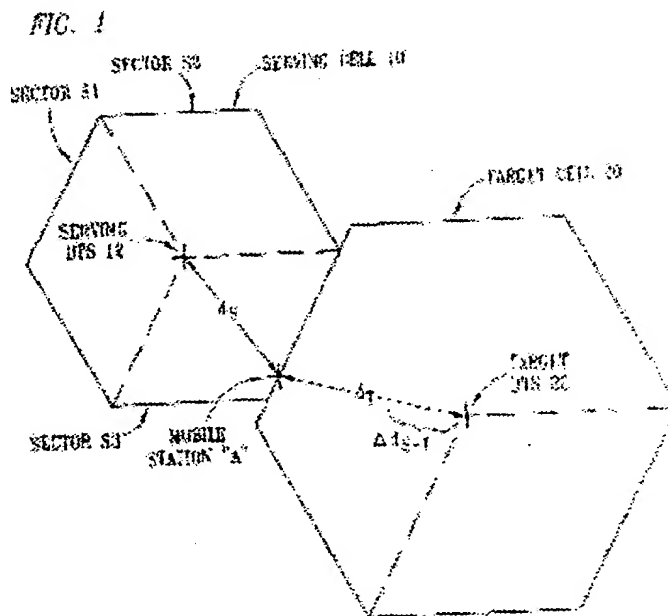
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 11, 15, 18, 22, 25, 26, 27, 28, 29, 30, 31, 32, 35, ~~36~~, 37, 38, 39 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Elliot, et al.**

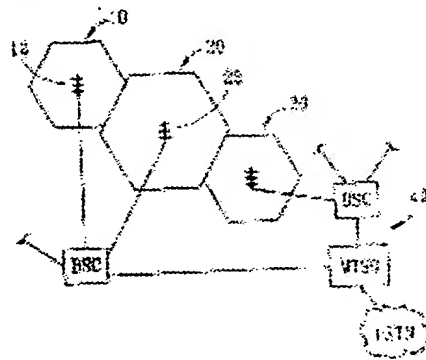
Elliot, et al disclose method (figures 12-14) for controlling operations in a cellular system (figure 2), comprising determining that a handoff is to be made for a portable wireless device (figure 1, #MOBILE STATION "A") operating in a serving cell (#10). Determining a position of the portable wireless device (#MOBILE STATION "A"). Determining a target cell (#20) based on the position and assigning the portable wireless device (#MOBILE STATION "A") to the target cell (#20).



Elliott, et al show wherein the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has fallen below a threshold. (*FIG. 3 illustrates the signaling sequence used in prior art TDMA management and control systems to hand-off an active call of*

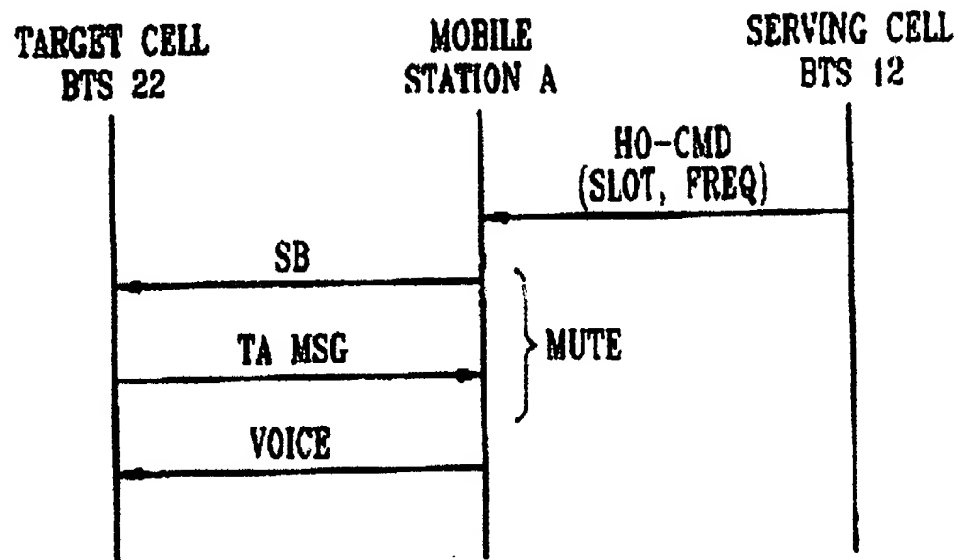
mobile station A from the serving cell 10 to the target cell 20. As the mobile station A approaches the boundary between the cells 10 and 20, a hand-off command (HO-CMD) is sent from the serving cell BTS 12 signaling the mobile station A to initiate a signaling sequence in short burst format with the target cell BTS 22. The hand-off command is triggered by a determination within the BSC or MTSO associated with the BTS 12 that the signal strength received by the BTS 12 or mobile station A has attenuated to a predetermined level. Information is sent from the serving cell BTS 12 to the mobile station A with the hand-off command, representing the time slot and frequency assignment for the traffic channel of mobile station A within the target cell 20.”)

FIG. 2



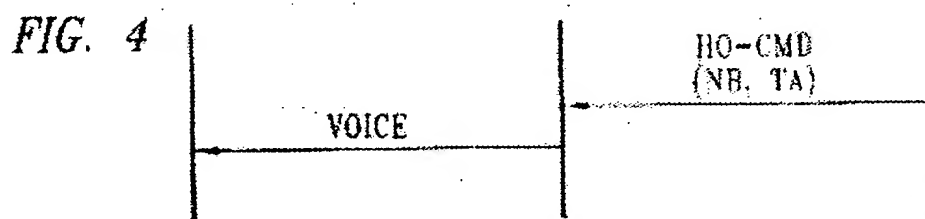
Elliott, et al teach the step of determining that a handoff is to be made is based on detecting that the bit error rate of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has exceeded a threshold ("Referring now to FIGS. 10, 11, 12, and 14, methods and means are illustrated for enhancing the quality of service, channel assignment and power level control over channels in a serving cell 200. Cell 200 is typical of

other cells and the wireless telecommunications network 40 and includes a BTS 220 and associated MTSO (not shown in FIGS. 10 through 14) which monitors all active channels in discrete time intervals or time-slots. After having served as the central office in completing a call setup, the associated MTSO continues to monitor the radio transmissions of mobile stations served within the cell 200 at prescribed intervals. Cell 200, preferably under the management and control of the associated MTSO, automatically and without substantial interruption, switches traffic and control channels used with mobile stations (not shown) served within the cell 200 to an idle or available channel previously experienced as having the highest quality of service, as defined by the network 40. The power level of transmissions to mobile stations served within the cell 200 is also increased or decreased to enhance the quality of service provided. Mobile stations receiving transmissions within the cell 200 provide information to the BTS 220 representing both the forward and reverse bit error rates (FBER and RBER) and power level of transmissions received. Such information is fed back to the BTS 220 by the mobile stations during active calls, via the traffic channel transmissions.")

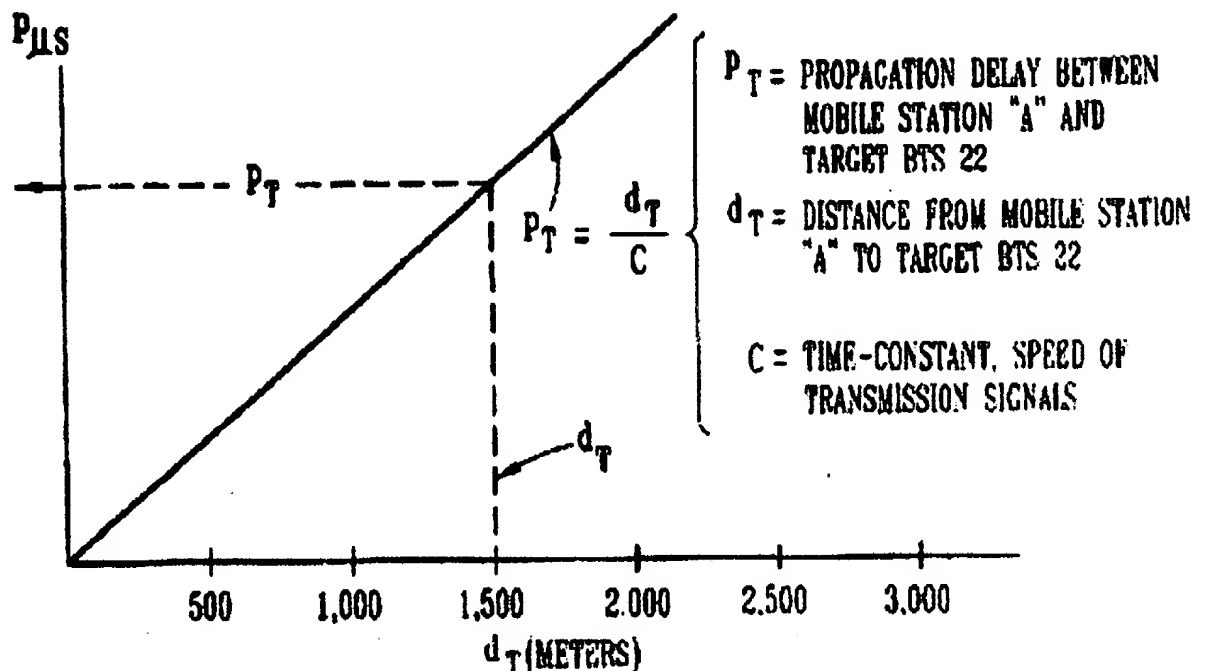
FIG. 3 PRIOR ART

Elliott, et al display the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has fallen below a first threshold and that the bit error rate of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has exceeded a second threshold ("Cell 200 is divided into sectors and S 1, S 2 and S 3, each of which in turn is sub-divided into a grid identifying a preselected number of quadrant locations within the sector in which information representing the power level, bit error rate received by a mobile station is stored in a matrix or array and suitable memory device or devices by the network 40. Development of such a grid of locations monitored within the cell 200 as shown

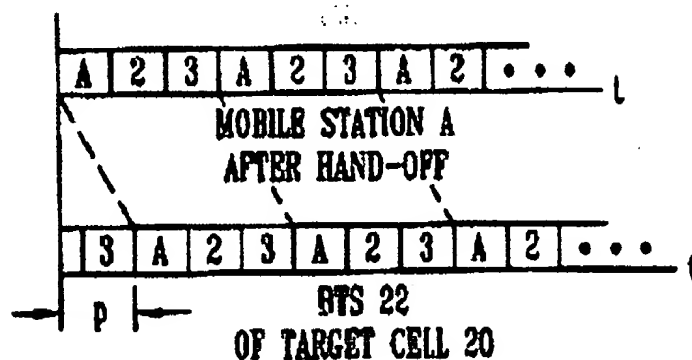
2 and the cell 200. Sector S 3 includes a grid overlay, with each grid location identified alphabetically. It will be apparent that the number and size of the grid locations and the corresponding area and number of locations monitored is selected to avoid excessive channel and power level adjustment yet capable of providing a sufficiently enhanced quality of service.”)



Elliott, et al disclose wherein the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) is less than the signal strength of a transmission between the portable wireless device (#MOBILE STATION "A" and a candidate cell (#20).

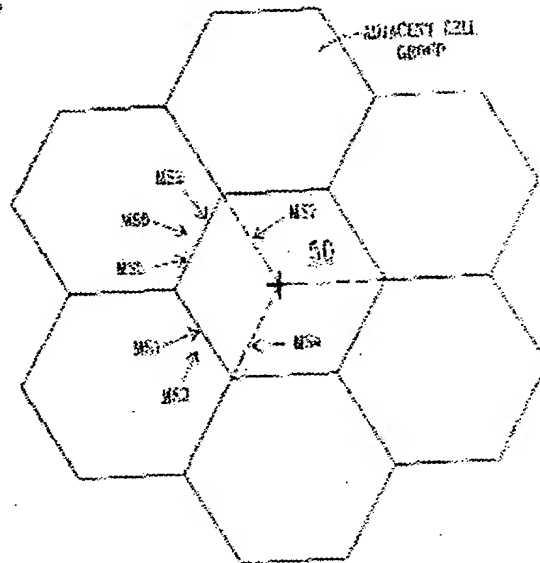
FIG. 5

Elliott, et al show the step of determining that a handoff is to be made is based on detecting that the bit error rate of the transmission between the portable wireless (#MOBILE STATION "A") device and the serving cell (#10) is greater than the bit error rate of a transmission between the portable wireless device (#MOBILE STATION "A") and a candidate cell (#20).

FIG. 6

Elliot, et al teach the step of assigning comprises handing off the portable wireless device (#MOBILE STATION "A") from the serving cell (#10) to the target cell (#20).

FIG. 7



Elliot, et al display the step of determination of a position is performed using one or more of the following methods: time difference of arrival (TDOA), angle-of arrival (AOA), location pattern matching (LPM), and global positioning system (GPS) (*"Information representing at least the approximate location of mobile station A relative to the target BTS 22 at the time hand-off is triggered can be obtained by employing a number of available techniques. Preferably, location information will be obtained from a GPS receiver coupled to or co-located with mobile station A. One such mobile telephone, available from Garmin International, Inc. of Olathe, Kansas, operates with AMPS technology and includes a GPS receiver and transmits accurate location information in*

substantially real-time to an associated BTS. Short Message Service (SMS) available in IS-136 systems can also be used to transmit location information from mobile station A. Triangulation techniques, such as time delay of arrival, can also be utilized to assess the position of mobile station A as well. Other techniques will also be apparent to those skilled in art.")

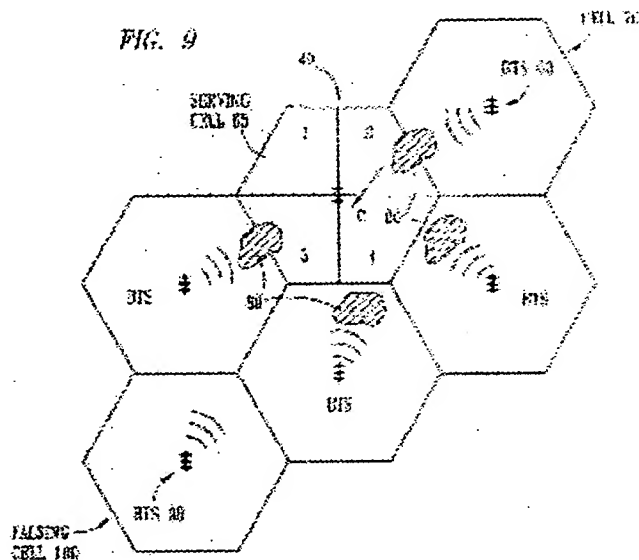
FIG. 8

MOBILE STATION
CHANNEL ASSIGNMENT QUEUE

PRIORITY	RISK	STATUS
MS 4	HIGH	HIGH
MS 2	LOW	HIGH
MS 5	LOW	HIGH
MS 1	HIGH	LOW
MS 7	HIGH	LOW
MS 3	LOW	LOW
MS 6	LOW	LOW

Elliot, et al disclose the step of determining a target cell comprises which of a plurality of candidate cells is closest to the portable wireless device. ("Referring now to FIG. 9, methods and means are shown for eliminating incorrect identification of a channel during a hand-off, known as "falsing," utilizing information representing the location and direction of travel of a mobile station C. Mobile station C is shown engaged in an active call within a group of adjacent cells forming a portion of the wireless telecommunications network 40 schematically described and FIG. 2. Such falsing occurs in current IS-136 systems implementing Mobile Assisted Hand-off (MAHO) technology and could occur in other circumstances in which a mobile station seeks to monitor the power level of channels broadcast by an adjacent cell. During an MAHO hand-off, the mobile station C monitors the power level of control channels of adjacent

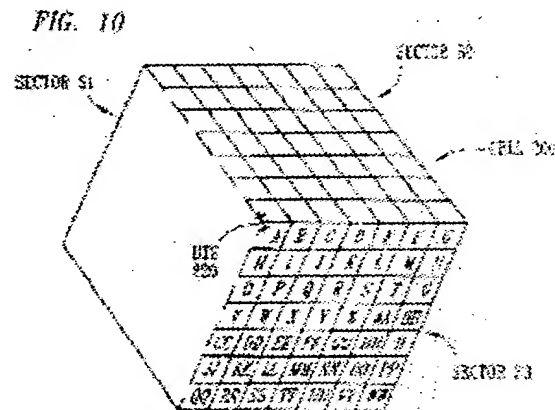
cells and sends such information to the management and control system of the network 40. Based on this information, the management and control system determines which of the adjacent cells is a preferred candidate to receive a hand-off of the call from the serving cell.”)



Elliot, et al disclose system for controlling operations in a cellular system (#40), comprising means for determining that a handoff is to be made for a portable wireless device (#MOBILE STATION "A") operating in a serving cell (#10) , wherein the portable wireless device (#MOBILE STATION "A") has a position. Means for determining the position of the portable wireless device (#MOBILE STATION "A") and means for determining a target cell (#20) based on the position.

Elliot, et al disclose means for assigning the portable wireless device (#MOBILE "A") to the target cell (#20).

Elliot, et al show means for assigning comprises the mobile telephone switching office (#MTSO), the MTSO being adapted to send a command through the serving cell (#10) for the portable wireless device to switch to the target cell (#20).



Elliot, et al teach a system for controlling operations in a cellular system (figure 2), comprising a location system (#40) adapted to determine a position of a portable wireless device (#MOBILE STATION "A"), wherein the portable wireless device is operating in a serving cell (#10) and a computer, the computer being adapted to generate an alert, wherein the alert indicates that the portable wireless device (#MOBILE STATION "A") should be handed off from the serving cell to a target cell (#20). Wherein the computer is further adapted to determine the target cell (#20) based on the position (*"Data or other information representing the location of the target BTS 22, preferably as well as the BTS of other cells in the network 40, is readily available for inclusion in a database, look-up table or other suitable memory resident in a data processor or distributed processing system of the management and control system of the network 40."*)

The location determination first calculates or obtains from a memory source the propagation distance dt of transmissions from the mobile station A to the target and BTS 22. Information representing dt is then used to determine the propagation delay P , using the formula: $P=dt/c$, where c is a time-constant representing the speed of transmission signals." And "FIG. 5 illustrates determination of the propagation delay P_t of the mobile station A by the management and control system with respect to the target cell 20 of the wireless telecommunications network 40, utilizing information representing the position of mobile station A. This propagation delay P_t , or time delay of arrival, can be converted by one or more data processors of the management and control system to time alignment units that are communicated to the mobile station A along with a hand-off command during the hand-off. Information representing the time alignment is specified in units of half-symbols.")

FIG. 11

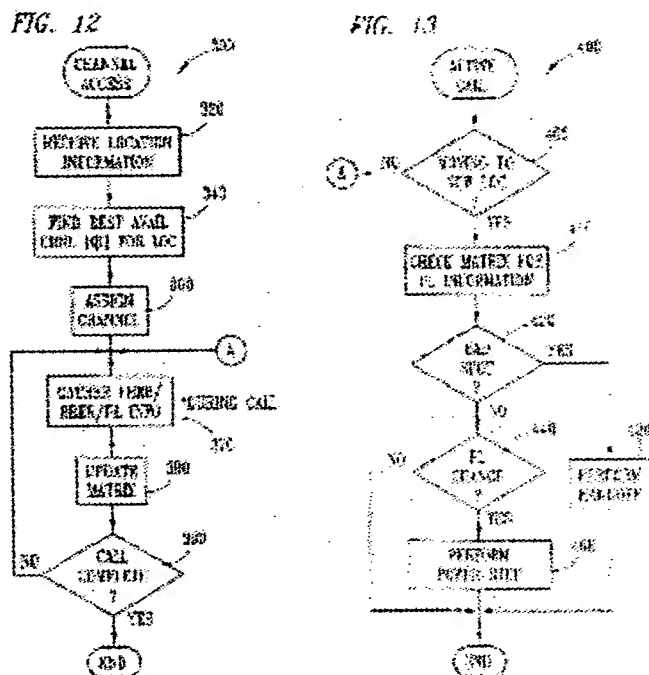
240

MATRIX

		CHANNELS				
		1	2	3	...	∞
QUADRANTS	A	QI=5.0 PL=3 NEXT=3	...	...		...
	B	...	...	...	...	...
	C	...	...	...	...	...
	D	...	...	...	...	...

	WW	...	...	...	...	...

Elliot, et al disclose location system (#40) comprises a mobile telephone switching office (#MTSO).



Elliot, et al disclose a method (Figures 12-14) for controlling operations in a cellular system (figure 2), comprising determining a position of a portable wireless device (#MOBILE STATION "A") operating in a serving cell (#10). Determining that a handoff is to be made for the portable wireless device (#MOBILE STATION "A") based on the position. Determining a target cell (#20) and assigning the portable wireless device (##MOBILE STATION "A") to the target cell (#20).

Elliott, et al show step of determining that a handoff is to be made comprises generating a handoff alert because the portable wireless device (#MOBILE STATION "A") is at or is approaching a boundary of the serving cell (#20).

5. Claims 39 and 40 rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Light, et al.**

Light, et al disclose a method for controlling operations in a cellular system (figure 2) comprising the steps of determining that a handoff is to be made for a portable wireless device (#22, 20) in a serving cell (#CELL 1). Determining a position of the portable wireless device (#20, 22). Determining a target cell (#CELL 2) that is geographically closes to the position (*"According to this invention, in certain situations, a determination is made as to which cell site is closest in distance to mobile unit 6. This distance measurement is performed by triangulation among, for example, three cell sites (or faces of cell sites, depending on the cell site configuration). Of the many triangulation methods that are possible, this exemplary embodiment will discuss measuring a delay (D) between the mobile unit 6 and cell site 1-1, and the phase at which the signal is received. Using these two factors, a determination can be made and be applied to the equations (below) and a simple comparison can be made to determine the closest cell site."*) and assigning the portable wireless device (#20 and 22) to the target cell (#CELL 2).

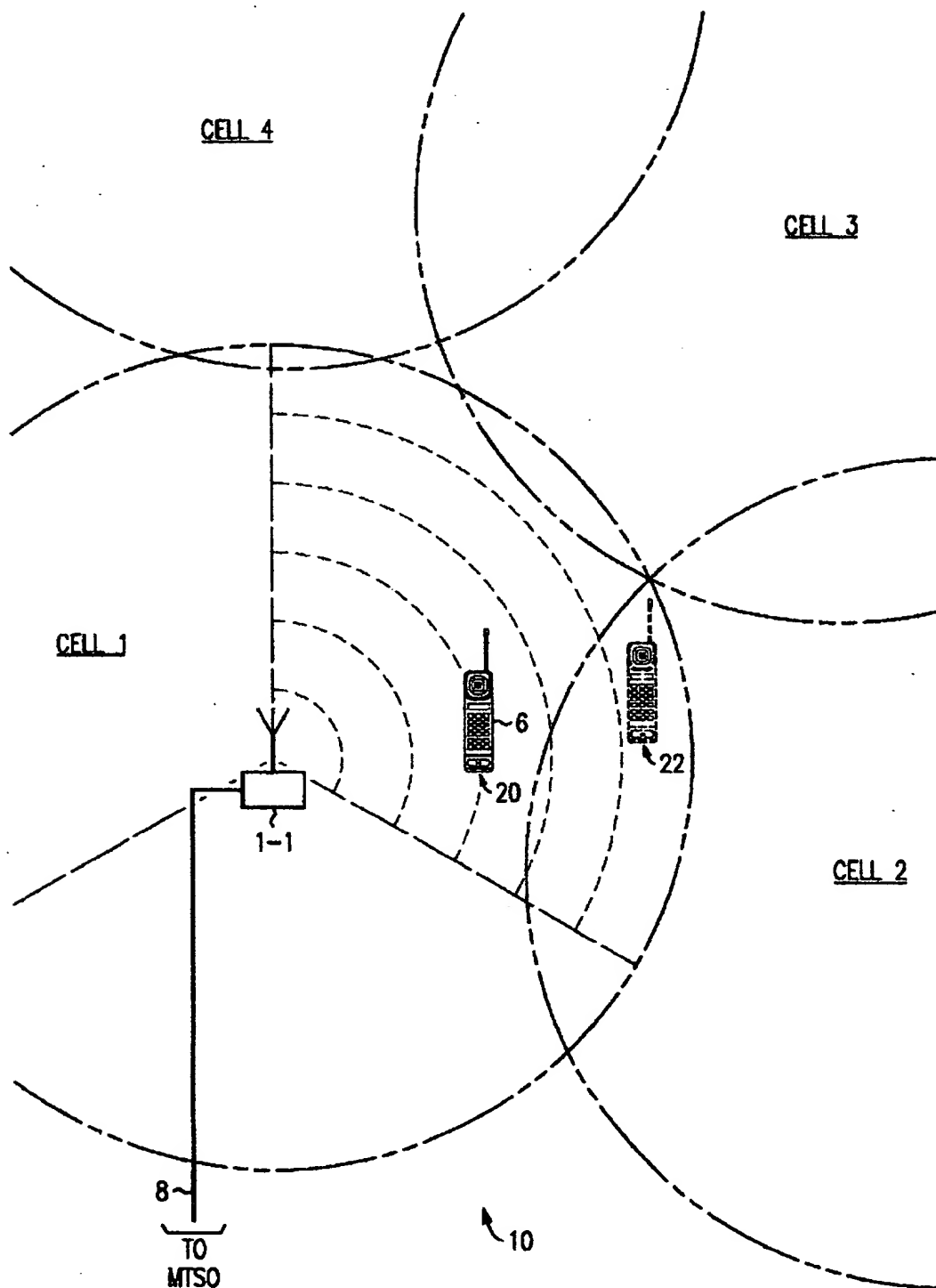
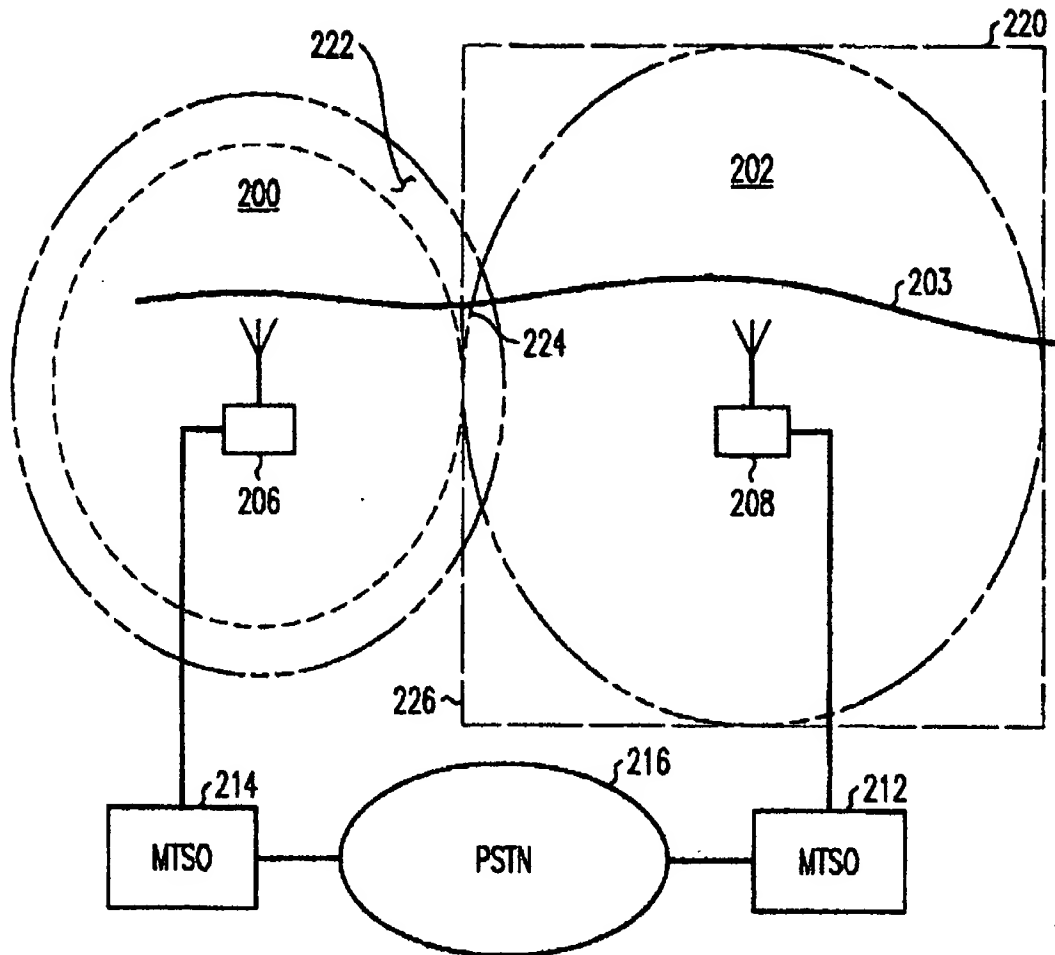


FIG. 2

Regarding claim 40, **Light, et al** states "According to this invention, therefore, an approximate location of a mobile unit may be rapidly determined. This new information may then be used to provide services not previously available. For example, when a mobile user makes an emergency call (911, 999, or whatever) it is known in the prior art that the location of the user may not be readily obtained without the user knowing his/her local geography and being able to relay such information. This may cause delays in providing a response when the user does not or cannot tell where he/she is. Now, when a call is received for an emergency number, the CDMA system can cause the mobile to make a determination of distance from a plurality of cell sites (or faces), which may be the neighbor list or may be a predetermined list to facilitate location determination. A location determination can then be made as described above, converted to map coordinated, and emergency crews dispatched to the determined location. Further, non-emergency numbers may cause the same location information to be gathered. For example, there could be a number to call if the mobile user runs out of gas (i.e., "**GAS") or has a flat tire or other mechanical breakdown. Additionally, a further predetermined number could be called for directions (i.e., "**LOST")."

**FIG. 3****Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 9, 10, 12, 13, 20, 21, 23, 24, 33, and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over **Elliot, et al** in view of **King, et al**

Elliot, et al disclose all subject matter, note the above paragraph, except for the velocity and position to be vectors.

King, et al is one of many examples that use position and velocity as vectors (*"FIG. 9 illustrates the mathematical processing required for computing the second order curve fit parameters for use by the mobile station 304 in the radio communication system of FIG. 300. The position vector and velocity vector data are provided to the process 704 (FIG. 7) to compute the second order curve fit vector constants, $X_{sub.0}$, $V_{sub.0}$, $V_{sub.1}$, $V_{sub.2}$. Further, the clock correction data received at the base station processor 506 is provided to a third group of software instructions 706. These instructions 706 compute the clock correction terms C and $af1$."*) in a method and system for controlling operations in a cellular system for the purpose of location determination in a radio communication system. Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the velocity and position as vectors, as taught by **King, et al**, in the method and system for controlling of in a cellular system of **Elliot, et al** in order for location determination of a mobile station in a fixed radio communication system having at least one base station that reduces the computational load on the mobile station.

10. Claims 14, 40, and 41, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Elliot, et al** in view of **Raith**.

Elliot, et al disclose all subject matter, not the above paragraph, except for stored geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific rod in the cellular coverage area.

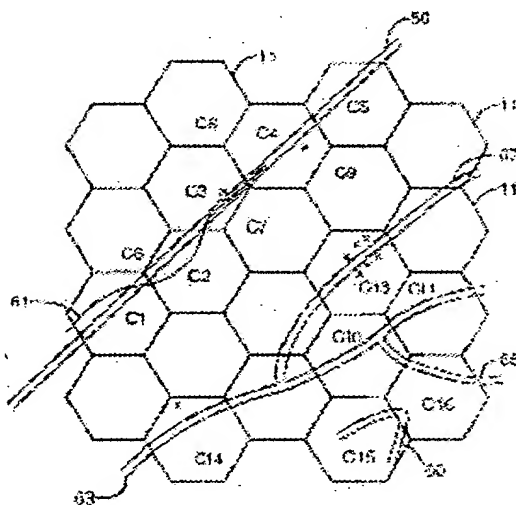


FIG. 3

Raith teaches the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific route in the cellular coverage area (figures 3 and 8) for the purpose of once a route has been defined and the path of the mobile terminal has been determined to correspond to the route, the network may monitor handoffs occurring along the defined route under other optional aspects.

Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific road in the cellular coverage area, as taught by **Raith**, in the method and system for controlling operations in a cellular system of **Elliot, et al** in order to store routes in memory that can be used to avoid multiple handoffs.

11. Claims 16, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Elliot, et al** in view of **Barnes, et al** or **Chambert**.

Elliot, et al disclose all subject matter, note the above paragraph, except explicitly showing computers in the cell site or at the mobile telephone switching office. Computers in cell sites and in mobile telephone switching offices is old and well known in the art and the examiner takes Official Notice as such. The examiner provides **Barnes, et al** and **Chambert** as evidence as such. Hence, it would have been very obvious, if not expected, to one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of computers in the cell sites and mobile switching offices in the method and system for controlling operations in a cellular system of **Elliot, et al** in order to calculate the values for handoffs.

If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well known statement in the next reply after the Office action in which the well known statement was made.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Light, et al** in view of **Raith, et al** and **Borkowski, et al**.

Light, et al disclose all subject matter, not the above paragraph, except for stored geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific rod in the cellular coverage area.

Raith teaches the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific rod in the cellular coverage area (figures 3 and 8) for the purpose of once a route has been defined and the path of the mobile terminal has been determined to correspond to the route, the network may monitor handoffs occurring along the defined route under other optional aspects.

Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific road in the cellular coverage area, as taught by **Raith**, in the method and system for controlling operations in a cellular system of **Light, et al** in order to store routes in memory that can be used to avoid multiple handoffs.

Borkowski , et al teaches the use of a geographic information system (*"accessing a geographic information database containing geographic information relating to the cellular telephone system including geographic coordinate data and cell size data to obtain from the geographic information database geographic information corresponding to the geographic coverage area of the cell within which the mobile station is located"*) in a method for controlling operations in a cellular system for the purpose of determining the location of a mobile station originating communications within a cell site. Hence, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of a geographic information system for the purpose of determining the location of a mobile station originating communications within a cell site, as taught by **Borkowski , et al**, in the method for controlling operations in a cellular system of either **Light, et al** or **Raith, et al**

well as mobile radio data networks has brought demand for location-based services and applications.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Light, et al** in view of **Raith, et al** and **Borkowski, et al** as applied to claim 41 above, and further in view of **King, et al**.

King, et al is one of many examples that use position and velocity as vectors ("FIG. 9 illustrates the mathematical processing required for computing the second order curve fit parameters for use by the mobile station 304 in the radio communication system of FIG. 300. The position vector and velocity vector data are provided to the process 704 (FIG. 7) to compute the second order curve fit vector constants, $X_{sub.0}$, $V_{sub.0}$, $V_{sub.1}$, $V_{sub.2}$. Further, the clock correction data received at the base station processor 506 is provided to a third group of software instructions 706. These instructions 706 compute the clock correction terms C and $af1$.) in a method and system for controlling operations in a cellular system for the purpose of location determination in a radio communication system. Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the velocity and position as vectors, as taught by **King, et al**, in the method and system for controlling of in a cellular system of **Light, et al** in view of **Raith, et al** and **Borkowski, et al** as applied to claim 41 above in order for location

at least one base station that reduces the computational load on the mobile station.

Response to Amendment

14. Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto

On December 1, 2003, the United States Patent and Trademark Office (Office) established a "*centralized delivery*" policy for patent related correspondence to enable the Office to promptly scan the correspondence into the Office's image file wrapper (IFW) system. The "*centralized delivery*" policy requires most patent related correspondence to be: a) faxed to the central facsimile number ((703) 872-9306), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), or c) mailed to the mailing address set forth in 37 CFR 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450).i The "*centralized delivery*" policy was revised in three follow-up notices. In order to provide further updated information, and to provide a single comprehensive statement of the Office's current "*centralized delivery*" policy, this notice is issued. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence.

General "*Centralized Delivery*" Policy:

For patent related correspondence, hand carry deliveries must be made to the Customer Service Window, and facsimile transmissions must be sent to the

central facsimile number ((703) 872-9306), unless an exception, as noted below, applies. Exceptions to the general policy of “*centralized delivery*” generally involve situations where special handling of the patent related correspondence is available. All the current exceptions are listed in this notice. Correspondence which is not related to a specific patent or patent application, such as a question on policy, on employment, or other general inquiry, is not covered by this notice. Below are two lists which set forth all the current exceptions to the “*centralized delivery*” policy. The first list covers the exceptions for certain hand carried items, and the second list covers the exceptions for certain facsimile transmitted items. Both lists reflect the relocation of most USPTO operations to the Alexandria, Virginia campus.

List I – Exceptions for Certain Hand Carried Correspondence Current exceptions:

Only the following types of correspondence may be delivered (hand-carried) to the specific location provided below instead of the Customer Service Window. If correspondence listed below is carried to the Customer Service Window, the correspondence will be accepted and routed to the appropriate office.

1. Access Requests:

Requests for access to patent application files may continue to be hand carried to the File Information Unit (FIU) in Room 2E04, 2900 Crystal Drive (South Tower), Arlington VA 22202. Requests for access to patent application files that are maintained in the Image File Wrapper system and

that have not yet been published may also be hand carried to the Public Search Facility on the 1st floor of the Madison East building, 600 Dulany Street, Alexandria VA 22314.

2. Patent Term Extensions under 35 U.S.C. § 156:

Patent term extension applications under 35 U.S.C. 156 (Hatch/Waxman) may be hand-carried to the Office of Patent Legal Administration (OPLA) in Room 07D85, 600 Dulany Street (Madison West building), Alexandria VA 22314. At the guard station in Madison West (near the elevators), the security guard should call the OPLA at either (571) 272-7744 or (571) 272-7746 for delivery assistance.

3. Assignments to be Recorded:

Assignments may be hand-carried to the Office of Public Records Customer Service Window on the 2nd floor of the South Tower building, 2900 Crystal Drive, Arlington VA 22202.

4. Office of General Counsel:

Correspondence for the Office of General Counsel may be hand-carried to the Office of General Counsel in Room 10C20, 600 Dulany Street (Madison East building), Alexandria VA 22314. At the guard station in Madison East (near the elevators), the security guard should call the Office of General Counsel at 571-272-7000 for delivery assistance.

5. Solicitor's Office:

Correspondence for the Solicitor's Office may be hand-carried to the Solicitor's Office in Room 8C43, 600 Dulany Street (Madison West building), Alexandria VA 22314. At the guard station in Madison West (near the elevators), the security guard should call the Solicitor's Office at 571-272-9035 for delivery assistance.

6. Interference related correspondence:

Correspondence relating to interferences may be hand-carried to the 1st floor lobby of Madison East building, 600 Dulany Street, Alexandria VA 22314, where a drop-off box for hand-carried documents to be filed with the Board of Patent Appeals and Interferences is located. Customers need to pass through the magnetometer and have the materials passed through the x-ray sensors before placing them in the drop-off box. The drop-off box is for Interference related correspondence ONLY. Boxes are not permitted in the drop-off box. Boxed materials should be hand-carried to Madison East, Room 9B55-A using the following procedures. At either guard station (concourse level or 1st floor) in Madison East (near the elevators), the security guard should call the Board of Patent Appeals and Interferences at 571-272-9797 to obtain authorization to allow entry into the building for delivery to Room 9B55-A. Access to Room 9B55-A is available from 8:30 AM

to 4:45 PM only. Documents/boxes hand-carried to the drop-off box or to Room 9B55-A after 4:45 PM (EST) will receive the next day's filing date. Customers desiring a stamped return receipt for their filing need to personally bring their filing and postcard to Room 9B55-A during the hours stated above, or leave the postcard with the filing (postcard must include correct postage mail stamp and the address where the postcard it to be mailed). The Board will stamp the filing date and mail the postcard to the customer.

7. Secrecy Order:

Applications subject to a secrecy order pursuant to 35 U.S.C. 181, or are national security classified, and correspondence related thereto, may be hand-carried to the Licensing and Review location. See 37 CFR Secs. 5.1(c) and 5.2(c). Licensing and review is expected to relocate to the Alexandria campus on April 1, 2005. Effective April 1, 2005, the Licensing and Review location is:

Technology Center 3600, Room 4B31, 501 Dulany
Street (Knox building), Alexandria VA 22314.

At the guard station in Knox (near the elevators), the security guard should call Licensing and Review at (571) 272-8203 for delivery assistance. Prior to April 1, 2005, the Licensing and Review location is:

Technology Center 3600, Office of the Director, 2451
Crystal Drive (Crystal Park 5 building), Room 3D07
Arlington, VA 22202.

8. Explicit Foreign Filing License Petitions:

Effective April 1, 2005, petitions for foreign filing license pursuant to 37 CFR 5.12(b) for which expedited handling is requested and petitions for retroactive license under 37 CFR 5.25, may be hand-carried to Licensing and Review in Room 4B41, 501 Dulany Street (Knox building), Alexandria VA 22314. At the guard station in Knox (near the elevators), the security guard should call Licensing and Review at (571) 272-8187 for delivery assistance.

9. Petitions to Withdraw from Issue:

Petitions to Withdraw from Issue may be hand carried to the Office of Petitions on the 7th floor of the Madison West building, 600 Dulany Street, Alexandria VA 22314. At the guard station in Madison West (near the elevators), the security guard should call the Office of Petitions at (571) 272-3282 for delivery assistance. Hand carried papers will be accepted between the hours of 8:30 a.m. until 3:45 p.m.

10. Documents requested by the Office of Patent

Publication:

Documents requested by the Office of Patent

Publication may be hand carried to the Office of Patent

Publication in Room 8A24, 2900 Crystal Drive (South Tower building), Arlington VA 22202, during business hours.

Elimination of certain previously authorized exceptions:

Hand carry delivery to a location other than the Customer Service Window is no longer permitted for the following types of correspondence:

(1) correspondence relating to PCT international applications prior to national stage entry (35 U.S.C. 371) [Note: as of January 14, 2005, there no longer is a separate PCT Operations Customer Window];

(2) petitions for express abandonment to avoid publication under 37 CFR 1.138(c);

(3) requests to initiate, or related to on-going, ex parte or inter partes reexamination proceedings;

(4) design patent applications with a corresponding request for expedited examination under 37 CFR 1.155; and (5) correspondence for the Office of Enrollment and Discipline (OED).

List II -Exceptions for Certain Facsimile Transmitted Correspondence For each Office location listed below, only the particular type of correspondence indicated may be transmitted to the specific facsimile number at that Office location. All other types of facsimile transmitted correspondence must be sent to the central facsimile number ((703) 872-9306).

1. Office of Initial Patent Examination (OIPE) Request for corrected Filing Receipt:

(703) 746-9195 facsimile number

Response to Notice to File Missing Parts:

(703) 746-4060 facsimile number

Note: New applications, correspondence being submitted for the purpose of obtaining an application filing date, and color drawings may NOT be transmitted by facsimile. OIPE Customer Service telephone number: (703) 308-1202

2. PCT Operations and PCT Legal Administration Correspondence subsequent to filing in an international application before the U.S. Receiving Office, the U.S. International Searching Authority, or the U.S. International Examining Authority:

Papers in international applications:

(703) 305-3230 facsimile number

Response to Decisions on Petition:

(571) 273-0459 facsimile number

Note: An international application for patent or a copy of the international application and the basic national fee necessary to enter the national stage, as specified in 37 CFR 1.495(b), may NOT be submitted by facsimile. See 37 CFR 1.6(d)(3) (referencing 37 CFR 1.8(a)(2)(i)(D) and (F)). Subsequent correspondence may be transmitted by facsimile in an application before the U.S. Receiving Office, the U.S. International Searching Authority, or the U.S. International Examining Authority, but it will NOT receive the benefit of any certificate of transmission (or mailing). See 37 CFR 1.8(a)(2) (i)(E).

Correspondence during national stage, subsequent to entry, are handled in the same manner as a U.S. national application.

The PCT Help Desk:

(571) 273-0419 facsimile number (703) 305-3257 telephone number

3. Office of Patent Publication Payment of an issue fee and any required publication fee by authorization to charge a deposit account or credit card, and drawings:

(703) 746-4000 facsimile number

Note: Although submission of drawings by facsimile may reduce the quality of the drawings, the Office will generally print the drawings as received.

Office of Patent Publication telephone numbers to check on receipt of payment:

(703) 308-6789 or 1-888-786-0101

4. Office of Pre-Grant Publication Petitions for express abandonment to avoid publication under 37 CFR 1.138(c), and Requests for express abandonment under 37 CFR 1.138: (703) 305-8568 facsimile number

Pre-Grant Publication Division telephone number for questions relating to the publication of patent applications:

(703) 605-4283. Questions may also be directed by e-mail to pgpub@uspto.gov.

5. Electronic Business Center (EBC) Requests for Customer Number Data Change (PTO/SB/124), and Requests for a Customer Number (PTO/SB/125):

(703) 308-2840 facsimile number.

Note: The EBC may also be reached by e-mail at: ebc@uspto.gov.

EBC telephone number for customer service and assistance:

(866) 217-9197

6. Assignment Branch Assignments or other documents affecting title:

(703) 306-5995 facsimile number

Note: Customers may submit documents directly into the automated Patent and Trademark Assignment System and receive the resulting recordation notice at their facsimile machine. (Assignment documents submitted through the Electronic Patent Assignment System also permits the recordation notice to be faxed to customers.) Credit card payments to record assignment documents are now accepted, and use of the Credit Card form (PTO-2038) is required for the credit card information to be separated from the assignment records. Only

documents with an identified patent application or patent number, a single cover sheet to record a single type of transaction, and the fee paid by an authorization to charge a USPTO deposit account or credit card may be submitted via facsimile. Please refer to the USPTO Web Site, at <http://www.uspto.gov/web/offices/ac/ido/opr/ptasfax.pdf> for more information regarding the submission of assignment documents via facsimile.

Assignment Branch telephone number for assistance:

(703) 308-9723 7.

Central Reexamination Unit (CRU) *Inter partes* reexamination correspondence, except for the initial request: (571) 273-0100 facsimile number

Note: All *ex parte* reexamination correspondence, except for the initial request, may be sent by facsimile transmission to the central facsimile number.

Correspondence related to reexamination proceedings will be separately scanned in the CRU.

CRU telephone number for customer service and inquiries: (571) 272-7705 8.

Board of Patent Appeals and Interferences Correspondence related to pending interferences permitted to be transmitted by facsimile (only where expressly authorized, see 37 CFR 1.6(d)(9)):

(571) 273-0042 facsimile number

Note: Correspondence should not be transmitted to this number if an interference has not yet been declared.

9. Office of the General Counsel Correspondence permitted to be transmitted to the Office of General Counsel:

(571) 273-0099 facsimile number

10. Office of the Solicitor Correspondence permitted to be transmitted by facsimile to the Office of the Solicitor:

(571) 273-0373 facsimile number

11. Licensing and Review Petitions for a foreign filing license pursuant to 37 CFR 5.12(b), including a petition for a foreign filing license where there is no corresponding U.S. application (37 CFR 5.13):

(571) 273-0185 facsimile number (if the fax is transmitted on or after April 1, 2005) (703) 305-7658 facsimile number (if the fax is transmitted prior to April 1, 2005)

Note: Correspondence to be filed in a patent application subject to a secrecy order under 37 CFR Sec. 5.1 through 5.5 and directly related to the secrecy order content of the application may **NOT** be transmitted via facsimile.
See 37 CFR Sec. 1.6(d)(6).

12. Office of Petitions Petitions to Withdraw from Issue:

(571) 273-0025 facsimile number

Note: All other types of petitions must be directed to the Central Facsimile Number ((703) 872-9306). Any paper other than a Petition to Withdraw from Issue which is sent to the Office of Petitions fax number (instead of the Central Facsimile Number) will be discarded. Petitions sent

to the Central Facsimile Number should be marked "Special Processing Submission".

Questions regarding this notice may be e-mailed to **PatentPractice@uspto.gov**, or directed to the Inventors' Assistance Center by telephone at (800)786-9199, or (703)308-4357. 3/2/05

15. Oversized Postcards Must Be Submitted With Sufficient Postage

Recently, a number of return receipt postcards have been returned to the U.S. Patent and Trademark Office (Office) because the postcards contained insufficient postage for an oversized postcard. Oversized postcards require First-Class letter postage. Customers are reminded that they are solely responsible for placing the proper postage on self-addressed postcards that are submitted to the Office for the purpose of obtaining a receipt for correspondence being filed in the Office.

Customers should be aware of the following guidance from the USPS regarding postage and acceptability for postcards:

1. In order to be eligible for the First-Class Mail card rates (currently \$0.23 per card, domestic delivery), cards must be of uniform thickness and made of unfolded and uncreased paper or card stock of approximately the quality and weight of a Postal Service stamped card. Cards claimed at the First-Class postcard rate must be:

- (a) Rectangular;
- (b) No less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick; and
- (c) No more than 4-1/4 inches high, 6 inches long, and 0.016 inch thick.

2. Cards that measure more than 4-1/4 inches high, 6 inches long, or 0.016 inch thick are charged postage at the First-Class Mail letter rates.

3. Cards that measure less than 3-1/2 inches high, 5 inches

long, and 0.007 inch thick are nonmailable.

Any return receipt postcard that does not contain sufficient postage or is not acceptable may not be delivered by the United States Postal Service (USPS) to the address provided on the postcard, and, if returned to the Office, may be discarded.

For information regarding the Office's postcard receipt practice in patent-related matters, see Manual of Patent Examining Procedure (MPEP) (8th Ed., Rev. 1, Feb. 2003), Section 503. Questions regarding sufficient postage for postcards should be directed to the United States Postal Service. Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center by telephone at (800)786-9199, or (703)308-4357. **OG Notices: 29 June 2004**

16. Termination of the Waiver of Provisions of 37 CFR 1.8 and 1.10 for Correspondence Intended for the United States Patent and Trademark Office but Addressed to Washington, DC 20231

Effective on April 4, 2005, the provisions of 37 CFR 1.8 (Certificate of Mailing) and 1.10 ("Express Mail") will no longer be waived for correspondence addressed to the United States Patent and Trademark Office (USPTO), Washington, DC 20231. On May 1, 2003, the USPTO changed its address for certain correspondence to P.O. Box 1450, Alexandria, VA 22313-1450. See 37 CFR 1.1 and *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003), 1269 *Off. Gaz. Pat. Office* 159 (Apr. 22, 2003). To allow applicants time to become accustomed to the new address in Alexandria, VA, the USPTO waived the provisions of 37 CFR 1.8 and 1.10 such that correspondence addressed to Washington, DC 20231 would be treated as acceptable under 37 CFR 1.8 and 1.10 for otherwise compliant Certificates of Mailing and "Express Mail." The United States Postal Service (USPS) has

ceased forwarding to the USPTO correspondence addressed to Washington, DC 20231. Additionally, the USPTO will no longer arrange for the delivery to Alexandria, VA of correspondence addressed to Washington, DC 20231 after April 3, 2005. Thus, after April 3, 2005, all correspondence addressed to the Washington, DC 20231 address will be returned to sender marked by the USPS as undeliverable. Such mail returned to the sender by the USPS **will not** be considered proof of prior filing or mailing under 37 CFR 1.8(b) or 1.10(e) since the correspondence was not mailed in accordance with 37 CFR 1.1. Pursuant to 37 CFR 1.1, correspondence intended for the USPTO must be mailed to P.O. Box 1450, Alexandria, VA 22313-1450, except as otherwise provided.

1. Correspondence intended for the USPTO, unless directed otherwise, must be addressed to: Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

2. Correspondence in patent-related matters to organizations reporting to the Commissioner for Patents must be addressed to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

3. Correspondence in trademark-related matters, except documents sent to the Assignment Services Division for recordation, requests for copies of trademark documents, and documents directed to the Madrid Processing Unit, must be addressed to: Commissioner for Trademarks P.O. Box 1451 Alexandria, VA 22313-1451

The above addresses are the USPTO's three general mailing addresses for mail delivered by the USPS; however, the USPTO has separate mailing addresses for

certain correspondence as set forth in the notice titled "*Mailing and Hand Carry Addresses for Mail to the United States Patent and Trademark Office*" (formerly, "*Special Mail Stops For Patent Mail*") that is published each week in the Official Gazette Notices and posted on the USPTO Internet web site. Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center (formerly the Patent Assistance Center (PAC)) by telephone at 800-786-9199 or 703-308-4357. Date: 3/1/05

Response to Arguments

17. Applicant's arguments filed January 21, 2005 have been fully considered but they are not persuasive.

Anticipatory reference need not duplicate, word for word, what is in claims; anticipation can occur when claimed limitation is "*inherent*" or otherwise implicit in relevant reference (Standard Havens Products Incorporated v. Gencor Industries Incorporated, 21 USPQ2d 1321). During examination before the Patent and Trademark Office, claims must be given their broadest reasonable interpretation and limitations from the specification may not be imputed to the claims (Ex parte Akamatsu, 22 USPQ2d, 1918; In re Zletz, 13 USPQ2d 1320, In re Priest, 199 USPQ 11). In response to Applicant's argument, the law of anticipation requires that a distinction be made between the invention described or taught and the invention claimed. It does not require that the reference "*teach*" what the subject patent teaches. Assuming that a reference is properly

"prior art," it is only necessary that the claims under consideration "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. It was held in In re Donohue, 226 USPQ 619, that, "It is well settled that prior art under 35 USC §102(b) must sufficiently describe the claimed invention to have placed the public in possession of it... Such possession is effected if one of ordinary skill in the art could have combine the description of the invention with his own knowledge to make the claimed invention." Clear inference to the artisan must be considered, In re Preda, 159 USPQ 342. A prior art reference must be considered together with the knowledge of one of ordinary skill in the pertinent art, In re Samour, 197 USPQ 1. During patent examination, the pending claims must be *"given the broadest reasonable interpretation consistent with the specification."* Claim term is not limited to single embodiment disclosed in specification, since number of embodiments disclosed does not determine meaning of the claim term, and applicant cannot overcome *"heavy presumption"* that term takes on its ordinary meaning simply by pointing to preferred embodiment (Teleflex Inc. v. Ficosa North America Corp., CA FC, 6/21/02, 63 USPQ2d 1374). Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA1969). *"Arguments that the alleged anticipatory prior art is nonanalogous art' or teaches away from the invention' or is not*

recognized as solving the problem solved by the claimed invention, [are] not germane' to a rejection under section 102." Twin Disc, Inc. v. United States, 231 USPQ 417, 424 (Cl. Ct. 1986) (quoting In re Self, 671 F.2d 1344, 213 USPQ 1, 7 (CCPA 1982)). A reference is no less anticipatory if, after disclosing the invention, the reference then disparages it. The question whether a reference "teaches away" from the invention is inapplicable to an anticipation analysis. Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir.1998).

Applicants' attorney states "*Elliot does not determine the target cell based on position*" The examiner disagrees since Elliot, et al clearly states, "*Information representing in substantially real-time the position or location of the mobile station C can assist in avoiding such false measurements and readings. This is accomplished by dividing the serving cell 65 into a grid, representing geographic quadrants 1, 2, 3 and 4. For each of the geographic quadrants within the serving cell 65, a database, lookup table or other suitable memory array is created, identifying the immediately adjacent cells contiguous with the boundary of each quadrant. The management and control system of the network 40, preferably the associated MSC, will recognize only the subset of such adjacent cells mapped to any particular quadrant as acceptable candidates for hand-offs from the serving cell 60 when the mobile station C is located that quadrant. In this manner, readings by mobile station C of channels that are not assigned to the subset of adjacent cells acceptable for hand off from a particular*

quadrant can be eliminated from determination, triggering and control of an MAHO or other hand-off. The size and number of quadrants utilized for each cell may be selected as needed to address the unique requirements of dense urban areas with heavy shadow losses and ducting effects."

Applicants' attorney argues that "unable to find any such handoff alert in Elliot." Taking the broadest, reasonable and plain meaning of alert, alert means notification. A handoff alert or notification is disclosed by Elliot, et al, "FIG. 3 illustrates the signaling sequence used in prior art TDMA management and control systems to hand-off an active call of mobile station A from the serving cell 10 to the target cell 20. As the mobile station A approaches the boundary between the cells 10 and 20, a **hand-off command (HO-CMD)** is sent from the serving cell BTS 12 signaling the mobile station A to initiate a signaling sequence in short burst format with the target cell BTS 22. **The hand-off command is triggered by a determination within the BSC or MTSO associated with the BTS 12 that the signal strength received by the BTS 12 or mobile station A has attenuated to a predetermined level. Information is sent from the serving cell BTS 12 to the mobile station A with the hand-off command, representing the time slot and frequency assignment for the traffic channel of mobile station A within the target cell 20.**" It is clear that the handoff command alerts or notifies the mobile station to initiate a signaling sequence in short burst format with the target cell BTS 22.

For at least the reasons advanced above, the application is **NOT** in
condition for allowance

Conclusion

18. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park , et al, Johansson, et al, and Jha disclose a method for controlling operations in a cellular system comprising the steps of determining that a handoff is to be made for a portable wireless device in a serving cell, determining a position of the portable wireless device, determining a target cell that is geographically closes to the position.

21. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

Certified Copies with Paper Certification

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

Certified Copies with Electronic Certification

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

Paris Convention for the Protection of Industrial Property and Priority

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at www.wipo.int/treaties/en/ip/paris/index.html.)

The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to opr@uspto.gov or by telephone at (703) 308-9743.

22. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

23. If applicants request an interview after this **final rejection**, prior to the interview, the intended purpose and content of the interview should be presented briefly, in writing.

Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration.

Interviews merely to **restate arguments** of record or to **discuss new limitations** which would require more than nominal reconsideration or new search will be denied.

24. USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies

Summary

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and U.S. patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications under the PCT during the international stage.

Deployment of E-Patent Reference System

The USPTO will deploy the full E-Patent Reference program starting in June of 2004. In accordance with the schedule shown below, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions in the indicated Technology Centers (TCs). Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

Schedule

June 2004 TCs 1600, 1700, 2800 and 2900

July 2004 TCs 3600 and 3700

August 2004 TCs 2100 and 2600

Description of E-Patent Reference System

On December 1, 2003, the Office made available a new feature in the Office's Private PAIR system, E-Patent Reference, to allow convenient downloading and printing of cited U.S. patents and U.S. patent application publications. A notice announcing this system was published in the Official Gazette, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The same notice also announced the Office's future plan to cease supplying copies of cited U.S. patents and patent application publications with Office actions.

The E-Patent Reference system allows an authorized user of Private PAIR to download the U.S. patents and U.S. patent application publications cited on a form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants as part of an information disclosure statement (IDS) on form PTO/SB/08 (1449). The retrieval of some or all of the documents is performed in one downloading step with each of the documents encoded as Adobe Portable Document format (.pdf) files.

The E-Patent Reference system was used by applicants during a pilot program in December 2003 and January 2004. In response to some technical issues discovered by users, changes to make the system more compatible with users' firewalls and office systems were made during

the pilot.

Consequently, applicants should expect to start receiving Office actions (in patent applications and during patent reexamination proceedings) without paper copies of cited U.S. patents and U.S. patent application publications in accordance with the schedule above. These documents will be available through the E-Patent Reference system for downloading using Private PAIR. Foreign patents and non-patent literature will continue to be provided to the applicant on paper. Communications from the Office during the international stage of an international application under the PCT will continue to include paper copies of all references, including U.S. patents and U.S. patent application publications.

In summary, all U.S. patents and patent application publications are available on the USPTO web site, from the Office of Public Records and from commercial sources. Additionally, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible.

Steps to Use the E-Patent Reference Feature

Access to Private PAIR is required to utilize E-Patent Reference. If you do not already have access to Private PAIR, the Office urges practitioners and applicants not represented by a practitioner to: (1) obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate; (2) obtain a USPTO customer number; (3) associate all of their pending and new application filings with their customer number; (4) install free software (supplied by the Office) required to access Private PAIR and the E-Patent Reference; and (5) make appropriate arrangements for Internet access.

Instructions for performing the 5 steps:

Step 1: Full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at:
<<http://www.uspto.gov/ebc/downloads.html>>. Note that a

notarized signature will be required to obtain a digital certificate.

Step 2: To get a Customer Number, download and complete the Customer Number Request form, PTO-SB/125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Patent Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or agent, then your registration number must be associated with your customer number. This association is accomplished by adding your registration number to the Customer Number Request form.

Step 3: A description of associating a customer number with the correspondence address of an application is described at the EBC Web page at: http://www.uspto.gov/ebc/registration_pair.html.

Step 4: The software for electronic filing is available for downloading at www.uspto.gov/ebc. Users can also contact the EFS Help Desk at (703) 305-3028 and request a copy of the software on compact disc. Users will also need Adobe Acrobat Reader, which is available through a link from the USPTO web site.

Step 5: Internet access will be required which applicants may obtain through a supplier of their own choice. As images of large documents must be downloaded, high-speed Internet access is recommended.

The E-Patent Reference feature is accessed using a button on the Private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents in the Portable Document Format (.pdf). The downloaded documents can be viewed and printed using Adobe's Acrobat Reader program and other software.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential

communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents and patent application publications for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide patents and patent application publications.

Section 707.05(a) of the Manual of Patent Examining Procedure, which currently provides that copies of cited references are in general automatically furnished without charge to applicant together with the Office action in which they are cited, will be revised in due course for consistency with the practice announced in this notice.

Comments

The Office published a notice announcing its plan to cease supplying copies of cited U.S. patent references with Office actions, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The Office received numerous comments in response to this notice. A summary of representative comments and the Office's responses to the comment, grouped by topics, follows:

Comment 1: The requirement to use the Office's customer number/digital certificate shifts the responsibility of producing paper copies to the applicant. A number of comments indicated that adopting the proposal would result in an increased responsibility for the applicant, as the applicant or applicant's representative would be required to print the references.

Response: The USPTO is implementing the E-Patent Reference program as part of the Office's e-Government initiative and to align funding priorities to the Patent Initiatives, including the hiring of examiners. Applicants can purchase copies of U.S. patents and patent application publications from a variety of vendors if they choose not to print copies through the E-Patent Reference system.

The USPTO is moving toward electronic filing and processing of both patent applications and trademark applications. The policy

announced in this notice is simply a step towards a more fully automated patent examination process. By analogy, briefs and court opinions that include case citations do not include paper copies of the cited cases. Rather, the cited cases are available via books or electronic databases. Similarly, the USPTO will no longer provide paper copies of U.S. patents and patent application publications since they are available electronically free of charge. Finally, this change will avoid duplication and waste since an applicant may not need to print out every page of a cited U.S. patent or patent application publication.

Comment 2: Adopting the proposal would hurt the solo practitioners and pro se applicants the most, which is unfair.

Response: The solo practitioners and pro se applicants have the same electronic access as the larger firms and corporations, available instantaneously over the Internet. If a solo practitioner or a pro se applicant chooses not to print copies of U.S. patents and patent applications publications through the USPTO Patents on the Web system or through the E-Patent Reference system, commercial sources that provide patents very quickly and inexpensively are available, and copies of U.S. patents and patent application publications are also available at the Patent and Trademark Depository Libraries (PTDLs). Additionally, the cost of patents if ordered from the USPTO Office of Public Records is very reasonable (\$3).

Comment 3: Some applicants indicated that the service is reliable and quick, and consistent with the electronic commerce initiatives in their law firms and businesses.

Response: As pointed out by some respondents, electronic copies of the references are very usable, available without mail delays, and capable of being sent to clients, other attorneys and experts by electronic means.

Comment 4: The statute 35 USC Sec. 132 requires the Office when sending a rejection to state the reasons "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application".

Response: The requirement that an Office action contain "such information and references as may be useful in judging of the propriety of continuing the prosecution of his application"

was added to the patent laws in the Patent Act of 1870. The circumstances surrounding this provision reveal that it requires that an Office action identify the prior inventions or patents that are relied upon in making a rejection, not that it requires that an Office action be accompanied by copies of the cited references. The USPTO did not even begin providing copies of cited references with Office actions until 1965, when 35 U.S.C. Sec. 41 was amended to authorize (but not require) the USPTO to provide copies of patents cited in Office actions without charge. See 35 U.S.C. Sec. 41(e) ("[t]he Director may provide any applicant issued a notice under [35 U.S.C. Sec. 132] with a copy of the specifications and drawings for all patents referred to in that notice without charge") (emphasis added). Nevertheless, the Office will provide access to U.S. patents and patent application publications, albeit not in paper form.

Comment 5: A number of users suggested that the Office provide paper references at an extra cost.

Response: The Office of Public Records does offer that service, at a reasonable cost, and it is available through a number of delivery channels. See 37 CFR 1.19 (a). Commercial services also provide U.S. reference documents, in person, by mail, and over the Internet.

Comment 6: Some comments indicated that the length of the pilot should have been expanded.

Response: E-Patent Reference system will continue through the end of May to allow applicants to become familiar with E-Patent Reference and to be sure all technical concerns are addressed.

For Further Information Contact

Questions concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the Patent EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov. Questions about this notice may be directed to Jay Lucas, at Jay.Lucas@uspto.gov and Rob Clarke, at Robert.Clarke@uspto.gov. **OG**
Notices: 18 May 2004

25. Consolidated Appropriations Act, 2005 enacted on December 8, 2004

H.R. 4818, the Consolidated Appropriations Act, 2005 (Consolidated Appropriations Act) was signed by President George W. Bush and enacted into law on December 8, 2004. The Consolidated Appropriations Act revises certain patent application and maintenance fees; provides separate fees for a basic filing fee, a search fee, and an examination fee; and requires an additional fee for any patent application whose specification and drawings exceed 100 sheets of paper (application size fee). The new patent fees are now effective and will remain in effect during the remainder of fiscal year 2005 and during fiscal year 2006. The patent maintenance fee changes apply to any maintenance fee payment made on or after December 8, 2004, regardless of the filing or issue date of the patent for which the fee is submitted. The revised maintenance fees took effect on December 8, 2004. Thus, any maintenance fee paid at any time on (or after) December 8, 2004 is subject to the revised maintenance fee amounts set forth in the Consolidated Appropriations Act.

Note: If you are paying via the USPTO's Internet Web site, there will likely be a delay in updating the maintenance-fee information on the USPTO's Office of Finance On-Line Shopping Web page. Therefore, if paying on-line, please refer to the updated fee schedule to ensure that you include the appropriate updated fee amount. Maintenance fees must be timely paid in the appropriate amount to avoid expiration of a patent.

The new basic filing fee (or national fee), search fee, examination fee, and application size fee apply to national patent applications (other than provisional applications) filed on or after December 8, 2004, and to international patent applications in which the basic national fee is paid on or after December 8, 2004. The new provisional application filing fee applies to any provisional application filing fee paid on or after December 8, 2004. The filing fee (or national fee), search fee, and examination fee are due on filing. If the filing fee (or national fee) is paid on filing, but the search fee and/or examination fee is missing, the USPTO will issue a notice requiring that any missing search fee and examination fee (but no surcharge until further notice) be paid within a specified period of time in order to avoid abandonment. Thus, if at least the full basic filing fee under the Consolidated Appropriations Act is paid on or after December 8, 2004, the USPTO will issue a notice requiring any balance of the search fee and the examination fee (but no surcharge). The remaining patent application fee changes, including the excess claims fees, extension of time fees, and appeal fees, apply to any fee payment made on or after December 8, 2004, regardless of the filing date of the application for which the fee is submitted.

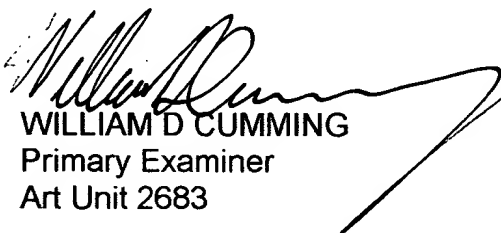
USPTO customers should monitor the USPTO's Internet Web site frequently for current patent fee information.

Payments from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM D CUMMING whose telephone number is 571-272-7861. The examiner can normally be reached on Tuesday & Wednesday, 10:30am to 8:30pm,.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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